City of Lafayette Staff Report

For: City Council

By: Ann Merideth, Community Development Director

Date Written: September 8, 2009

Meeting Date: September 14, 2009

Subject: Update on the Multi-Jurisdictional Local Hazard Mitigation Plan

---

Summary

In 2004, the City Council joined with ABAG and other Bay Area cities and counties to prepare a Multi-Jurisdictional Hazard Mitigation Plan as required by FEMA. Participation in a Plan is required by the Disaster Mitigation Act of 2000 as a condition of receiving mitigation grants from the Federal Emergency Management Agency (FEMA) and other federal and state agencies. This program does not affect a local agency's ability to receive FEMA funds in the event of a disaster. Virtually every city and county in the Bay Area did participate in the original Plan. The 5-year update of the Plan is now underway. On May 26, 2009, the City Council authorized participation in this Plan updating process.

The City Council will be discussing the update in more detail at it September 28 meeting. To refresh the Council's memory about the Lafayette's 2005 Annex to the Plan, this document is attached.

Recommendation

Receive report, and continue to September 28, 2009.

Attachment

City of Lafayette Local Annex, Multi-Jurisdictional Local Government Hazard Mitigation Plan for the San Francisco Bay Area, 2005

2005

Multi-Jurisdictional Local Government Hazard Mitigation Plan for the San Francisco Bay Area

City of Lafayette Local Annex

Contact information:

Ann Merideth
Community Development Director
City of Lafayette
3675 Mount Diablo Blvd., Suite 210
Lafayette, CA 94549

925-299-3218 phone

AMerideth@ci.lafayette.ca.us email

LOCAL HAZARD MITIGATION PLAN ANNEX
City of Lafayette

Introduction

The City of Lafayette is located in Central Contra Costa County, California. The population is 24,000 based on the 2000 Census.[1] The adopted Final 2004/2005 Budget is $29.96 million. The City has the equivalent of 34 full-time employees. The City contracts with Contra Costa County Sheriff Department for police services, Contra Costa County for building inspection and permitting, and with a private corporation for public works (maintenance) services. Fire protection services are provided by the Contra Costa County Fire Protection District. There are two school districts in the community: Lafayette School District (K-8) and Acalanes Union High School District (9-12).

The Planning Process

The City adopted a revised General Plan in October 2002. This Plan includes a Safety Element that includes a discussion, goals, policies and programs regarding the following: landslides and unstable slopes; seismic hazards; flood hazards; fire hazards; hazardous materials; electromagnetic field hazards; police services; and emergency preparedness. Prior to adoption the General Plan, including the Safety Element, was the subject of hundreds of hours of public review and comment and subject to environmental review pursuant to the California Environmental Quality Act (CEQA). The City also enforces the requirements of CEQA in its review of public capital improvement projects and private development proposals.

These activities by the City were the basis for the planning process for the multi-jurisdictional Local Hazard Mitigation Plan. The City has participated in various ABAG workshops and meetings, including the general "kick-off" meeting. In addition, the City has provided comments on the multi-jurisdictional plan throughout its development. Finally, the City has provided ABAG information on facilities that are considered critical in the Lafayette community.

City staff participated in considering and prioritizing mitigation strategies. Staff included the Community Development Director, Planning & Building Services Manager, City Engineer, and Police Chief. The public was provided the opportunity to review the draft annex and mitigation strategies at the City Council meeting on March 14, 2005. Prior to this meeting, the staff proposal was also available on the City's website. The City Council provided comments on the draft annex and mitigation strategies.

The resolution adopting the Local Hazard Mitigation Plan with Lafayette's Annex and Mitigation Strategies will be considered by the City Council in April. The Mitigation Strategies will ultimately become an implementation appendix of the General Plan's Safety Element.

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area, five related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought). Except for tsunamis, these hazards also impact this community. The threat of a tsunami does not impact the City because Lafayette is not located along the ocean coast.

---

[1] For complete Census information on Lafayette, see http:www.bayareacensus.ca.gov/.

The City undertook a number of general hazard and topographical mapping activities as during the preparation of the Safety Element and the subsequent Hillside Development regulations in the Lafayette Municipal Code. These General Plan maps can be viewed at the City's website at www.ci.lafayette.ca.us These maps are more general than those currently shown on ABAG's website at http://quake.abag.ca.gov/mitigation. Lafayette is not shown on the CGS Landslide and Liquefaction mapping.

Information on the 24 disasters declared in Contra Costa County between 1950 and 2000 is at http://quake.abag.ca.gov/mitigation/disaster-history.html.

The City reviewed the hazard exposure of urban land within the community based on information at ABAG's website at http://quake.abag.ca.gov/mitigation/pickdbh2.html. Of the 8,450 urban acres in the city,

- 93 acres are in the 500-year flood plain and 148 acres are in the 100-year flood plain
- 578 acres are subject to dam inundation
- 3,374 acres are in areas of few landslides and 2,856 acres are in areas of mostly landslides
- 1,621 acres are in areas of moderate liquefaction susceptibility
- All 8,450 acres are in the highest two categories of shaking potential due to its proximity to the Hayward and Concord faults
- 1,217 acres are in the high wildfire threat area and 666 acres are in the very high wildfire threat area
- 7,551acres are in the wildland-urban interface threat area
- None of the urban acres are within a CGS earthquake study zone

The City reviewed the hazard exposure if infrastructure based on information at ABAG's website at http://quake.abag.ca.gov/mitigation/pickdbh2.html. Of the 155 miles of roads in the city,

- 3 miles are in the 500-year flood plain and 4 miles are in the 100-year flood plain
- 13 miles are subject to dam inundation
- 65 miles are in areas of few landslides and 30 miles are in areas of mostly landslides
- 43 miles are in areas of moderate liquefaction susceptibility
- All 155 miles are in the highest two categories of shaking potential
- 9 miles are in the high wildfire threat area and 9 miles are in the very high threat wildlife threat area
- 152 miles are in the wildland-urban interface threat area
- None of the miles of roads are within the tsunami threat area
- None of the miles of roads are within a CGS earthquake study zone

Finally, the City reviewed the hazard exposure of critical health care facilities, schools, and city-owned facilities based on information at ABAG's website at http://quake.abag.ca.gov/mitigation/pickdbh2.html. Of these critical facilities in the city,

- No critical health care facilities, schools, or city-owned facilities are in the 500-year or 100-year flood plain
- 2 critical health care facilities, 2 schools, and 2 city-owned facilities are subject to dam inundation
- 1 critical health care facility, 6 schools, and 5 city-owned facilities are in areas with very few or no landslides, and 1 critical care facility, 3 schools, and 3 city-owned facilities are in areas with few landslides
- 1 critical health care facility, 4 schools, and 1 city-owned facility are in areas of low or very low liquefaction susceptibility, and 1 critical care facility, 5 schools and 7 city-owned facilities are in areas of moderate liquefaction susceptibility
- All 2 critical health care facilities, 9 schools, and 8 city-owned facilities are in the highest two categories of shaking potential
- All 2 critical health care facilities, 9 schools, and 8 city-owned facilities are in the moderate or low wildfire threat area

- Only 1 school is not within the wildland-urban interface threat area; all other critical facilities are within the threat area
- None of the critical health care facilities, schools, or city-owned facilities are within the tsunami threat area
- None of the critical health care facilities, schools, or city-owned facilities are within a CGS earthquake study area

In spite of the areas of the city located in flood-prone areas, there have been only two repetitive loss properties based on the information at ABAG's website at http://quake.abag.ca.gov/mitigation/pickflood.html

The California Geological Survey has not completed its mapping of earthquake-induced landslide susceptibility. Thus, no maps of this hazard exist for risk assessment. Mitigation strategy LAND-a-5 notes that the City is supportive of CGS in its efforts to complete this mapping.

Drought, though a potential problem in Lafayette, is not fully assessed. The City will be working with ABAG and EBMUD on this issue.

Potential risks that are not shown on maps readily available to the City or the community are the underground pipelines, including high-pressure natural gas, that run through the community.

Beyond what information regarding the nine hazards is available through the City and ABAG current mapping, the City will continue to work with ABAG in 2005 through early 2006 to improve the risk assessment information being compiled by ABAG. As the impacts from these nine hazards are not fully developed, the City has reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The conclusion is that earthquakes (shaking, landslides and liquefaction), flooding, and wildfires are all important to the community.

Mitigation Activities and Priorities

As a participant in the ABAG multi-jurisdictional planning process, the City of Lafayette staff helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. The list was provided for review to the Community Development Director, Planning & Building Services Manager, City Engineer, Public Works Services Manager, Police Chief, Parks & Recreation Director, and City Attorney. It was confirmed through the review process that the City's priorities for mitigation strategies are consistent with City policy established during the recent preparation of the General Plan, Capital Improvements Program, and hillside development regulations. At the meeting, all of the mitigation strategies were reviewed. The tentative decision on priority was made based on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage.

In the future, the City is committed to developing better hazard mitigation and risk information as resources allow. At this time, the City is putting its resources towards several projects that require immediate attention. Should the City receive grant funding, the City could implement mitigation strategies that are within the City's jurisdiction, but not considered for implementation at this time. The City agrees with the principle that the jurisdictions are not trying to create a disaster-proof region, but a disaster-resistant region.

A draft list of mitigation strategies were presented to the City Council on March 14, 2005. The public was provided an opportunity to comment on the strategies both before and during the Council's consideration. The draft list was revised based on the input from this public review. The final strategies (as shown in the attached table) were adopted by the City Council on July 11, 2005.

In the City of Lafayette, many of the strategies are in existing programs already a part of the City's land use policies, programs, and regulations through its General Plan, Zoning Ordinance, Capital Improvement Program, and public works maintenance. New activities identified as part of this Annex will be incorporated into these policies, programs and regulations through future updates. Other activities may require additional funding sources that not have been identified at this time. The City will continue to identify future funding sources to implement its adopted policies, programs and regulations as necessary.

Plan Maintenance and Updating Process

The City of Lafayette is committed to reviewing and updating this Annex at least once every five years, as required by the Disaster Mitigation Act of 2000. The City's Community Development Director will contact ABAG four years after the Local Hazard Mitigation Plan is approved to ensure ABAG will undertake the update process. If so, the City plans at this time to participate in the multi-jurisdictional Plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other options for complying with the Disaster Mitigation Act of 2000 will be considered by the City.

Further, the City of Lafayette's Community Development Department (Planning, Engineering, and Public Works Services) will ensure that monitoring of this Annex will occur on a regular and on-going basis. However, the major disasters affecting our community, legal challenges, notices from ABAG as the lead agency in this process, and other triggers will be used. Finally, the Annex will be reviewed annually by appropriate City staff. This annual review will focus on evaluating the Annex in light of fiscal, technological, and political changes or other significant events. As necessary, City staff will recommend to the City Council whether the Plan should be updated.

The public will continue to be involved whenever the Plan is updated and, as appropriate, during the monitoring and evaluation process. For example, information on the Plan will be posted on the City's website and/or in the City's newsletter. All public comments will be considered by City staff and City Council during the Plan update process, and, where appropriate, reflected in the updated Plan.

Infrastructure Mitigation Strategies

	Specific Mitigation Strategy	Priority (CHECK ONLY ONE)								Responsible Agency or Department (Required if Existing Program, Very High, High, or Under Study)	Ordinance or Resolution # (if existing program), Estimated Cost and Possible Funding Agency (if high priority), Estimated Date of Completion (if study) OR Other Comments
		Existing Program	Very High	High	Moderate	Under Study	Not Applicable, Not Appropriate, or Not Cost Effective	Not Yet Considered			
INFR - a - Multihazard											
1)	Assess the vulnerability of critical facilities designated by lifeline operators to damage in natural disasters or security threats, including facilities owned outside of the Bay Area that can impact service delivery within the region. **Note** - Lifeline agencies, departments, and districts are those that operate transportation and utility facilities and networks.						✓				Not applicable to City's , but City encourages lifeline operators' efforts in the Lafayette area. City strongly encourages PG&E, others to map and sign pipelines that run through Lafayette.
2)	Comply with State of California and federal requirements to assess the vulnerability of dams to damage from earthquakes, seiches, landslides, liquefaction, or security threats.						✓			EBMUD	Not applicable to City's jurisdiction
3)	Encourage the cooperation of utility system providers and cities, counties, and other special districts to develop strong and effective mitigation strategies for infrastructure systems and facilities.	✓								Utility and other infrastructure providers	City has and will continue to support the efforts of utilities and infrastructure providers.
4)	Retrofit or replace critical lifeline facilities and/or their backup facilities that are shown to be vulnerable to damage in natural disasters.	✓								City of Lafayette	For public roads and storm drains within the City only, pursuant to adopted Capital Improvement Program and Storm Drain Master Plan.

Infrastructure Mitigation Strategies

5)	Support and encourage efforts of ***other*** (lifeline) agencies as they plan for and arrange financing for seismic retrofits and other disaster mitigation strategies. (For example, a city might pass a resolution in support of a transit agency's retrofit program.)	✓				City of Lafayette	City has supported the improvements of other agencies' facilities, such as improvement of Caldecott Tunnel, when such improvements are imporant to the community.
6)	Plan for speeding the repair and functional restoration of lifeline systems through stockpiling of shoring materials, temporary pumps, surface pipelines, portable hydrants, and other supplies, such as those available through the Water Agency Response Network (WARN).				✓	EBMUD	Not applicable to City's jurisdiction
7)	Engage in, support, and/or encourage research by others on measures to further strengthen transportation, water, sewer, and power systems so that they are less vulnerable to damage in disasters.	✓				City of Lafayette	See #5 above.
8)	Pre-position emergency power generation capacity (or have rental/lease agreements for these generators) in critical buildings of cities, counties, and special districts to maintain continuity of government and services.	✓				City of Lafayette	Emergency generator in place outside Police Offices/EOC
9)	Have back-up emergency power available for critical intersection traffic lights.			✓		City of Lafayette	No analysis completed
10)	Develop unused or new pedestrian rights-of-way as walkways to serve as additional evacuation routes (such as fire roads in park lands).			✓		City of Lafayette	No analysis completed
11)	Coordinate with PG&E and others to investigate ways of minimizing the likelihood that power interruptions will adversely impact vulnerable communities, such as the disabled and the elderly.		✓			PG&E	City will support and work with PG&E to ensure power to seniors through City's Senior Services Commission

Infrastructure Mitigation Strategies

12)	Encourage replacing aboveground electric and phone wires and other structures with underground facilities, and use the planning-approval process to ensure that all new phone and electrical utility lines are installed underground.	✓				City of Lafayette	City has undergrounded utilities in downtown; where appropriate requires new development to underground in the downtown area
13)	Coordinate with the State Division of Safety of Dams to ensure an adequate timeline for the maintenance and inspection of dams, as required of dam owners by State law.	✓				EBMUD	City encourages EBMUD to maintain and inspect Lafayette Reservoir
14)	Encourage communication between State OES, FEMA, and utilities related to emergencies occurring outside of the Bay Area that can affect service delivery in the region.	✓				City of Lafayette	City's Emergency Preparedness Commission works with OES and othe agencies
15)	Ensure that transit operators, private ambulance companies, cities, and/or counties have mechanisms in place for medical transport during and after disasters that take into consideration the potential for reduced capabilities of roads following these same disasters.	✓				City of Lafayette	Part of City's ongoing emergency preparedness program through OES, other agencies
16)	Effectively utilize the Transportation Management Center (TMC), the staffing of which is provided by Caltrans, the CHP and MTC. The TMC is designed to maximize safety and efficiency throughout the highway system. It includes the Emergency Resource Center (ERC) which was created specifically for primary planning and procedural disaster management.				✓		Not applicable to City's jurisdiction
INFR - b - Earthquakes							
1)	Expedite the funding and retrofit of seismically-deficient city- and county-owned bridges and road structures by working with Caltrans and other appropriate governmental agencies.		✓				City's experience is that Caltrans' processes has not allowed this to happen yet for the State-owned bridges in Lafayette. No City-owned bridges.

Infrastructure Mitigation Strategies

2)	Establish a higher priority for funding seismic retrofit of existing transportation and infrastructure systems (such as BART) than for expansion of those systems.	✓				City of Lafayette	City works with agencies through its representatives to those agencies
3)	Include "areas subject to high ground shaking, earthquake-induced ground failure, and surface fault rupture" in the list of criteria used for determining a replacement schedule for pipelines (along with importance, age, type of construction material, size, condition, and maintenance or repair history).				✓	PG&E, others	Not applicable to City's jurisdiction, but City supports the maintenance, improvement of existing pipleines in community
4)	Install specially-engineered pipelines in areas subject to faulting, liquefaction, earthquake-induced landsliding, or other earthquake hazard.				✓		Not applicable to City's jurisdiction, but City supports the maintenance, improvement of existing pipleines in community
5)	Replace or retrofit water-retention structures that are determined to be structurally deficient.				✓		Not applicable to City's jurisdiction
6)	Install portable facilities (such as hoses, pumps, emergency generators, or other equipment) to allow pipelines to bypass failure zones such as fault rupture areas, areas of liquefaction, and other ground failure areas (using a priority scheme if funds are not available for installation at all needed locations).				✓		Not applicable to City's jurisdiction
7)	Install earthquake-resistant connections when pipes enter and exit bridges.				✓		Not applicable to City's jurisdiction
8)	Comply with all applicable building and fire codes, as well as other regulations (such as state requirements for fault, landslide, and liquefaction investigations in particular mapped areas) when constructing or significantly remodeling infrastructure facilities.	✓					City meets all codes and regulations in the construction and reconstruction of public roads and storm drains
9)	Clarify to workers in critical facilities and emergency personnel, as well as to elected officials and the public, the extent to which the facilities are expected to perform only at a life safety level (allowing for the safe evacuation of personnel) or are expected to remain functional following an earthquake.			✓			Part of the City's ongoing emergency operations training

Infrastructure Mitigation Strategies

10)	Examine the feasibility of developing a water-borne transportation "system" – comprised mainly of relatively inexpensive barges – across the Bay for use in the event of major earthquakes. Implementation of such a system could prove extremely useful in the event of structural failure of either the road-bridge systems or BART and might serve as an adjunct to existing transportation system elements in the movement of large numbers of people and/or goods.			✓		Not applicable to City's jurisdiction
INFR - c - Wildfire						
1)	Ensure a reliable source of water for fire suppression (meeting acceptable standards for minimum volume and duration of flow) for existing and new development.	✓			City of Lafayette	Lafayette General Plan Safety Element Programs S-4.1.6, S-4.2.5
2)	Develop a coordinated approach between fire jurisdictions and water supply agencies to identify needed improvements to the water distribution system, initially focusing on areas of highest wildfire hazard.			✓		Not applicable to City's jurisdiction, but supports coordinated approach between agencies
3)	Develop a defensible space vegetation program that includes the clearing or thinning of (a) non-fire resistive vegetation within 30 feet of access and evacuation roads and routes to critical facilities, or (b) all non-native species (such as eucalyptus and pine, but not necessarily oaks) within 30 feet of access and evacuation roads and routes to critical facilities.	✓			City of Lafayette	Lafayette General Plan Safety Element Policy S-4.2; Lafayette Municipal Code Chapter 3-5, Fire Safety
4)	Ensure all dead-end segments of public roads in high hazard areas have at least a "T" intersection turn-around sufficient for typical wildland fire equipment.	✓			City of Lafayette	Only for new roads through the development review process
5)	Enforce minimum road width of 20 feet with an additional 10-foot clearance on each shoulder on ***all*** driveways and road segments greater than 50 feet in length in wildfire hazard areas.			✓		Not consistent with Lafayette topography and hillside development regulations. Contra Costa Fire District requires 16' minimum width.

Infrastructure Mitigation Strategies

6)	Require that development in high fire hazard areas provide adequate access roads (with width and vertical clearance that meet the minimum standards of the *Fire Code* or relevant local ordinance), onsite fire protection systems, evacuation signage, and fire breaks.	✓				City of Lafayette	Lafayette General Plan Safety Element Policies S-4.2, S-4.5; Lafayette Municipal Code Chapter 3-5 Fire Safety
7)	Ensure adequate fire equipment road or fire road access to developed and open space areas.	✓				City of Lafayette	Lafayette General Plan Safety Element Program S-4.2.5; Lafayette Municipal Code Chapter 3-5, Fire Safety
8)	Maintain fire roads and/or public right-of-way roads and keep them passable at all times.	✓				City of Lafayette	City's vegetation management program for public rights-of-way
INFR - d - Flooding							
1)	Conduct a watershed analysis of runoff and drainage systems to predict areas of insufficient capacity in the storm drain and natural creek system.	✓				City of Lafayette	City's adopted Storm Drain Master Plan
2)	Develop procedures for performing a watershed analysis to look at the impact of development on flooding potential downstream, including communities outside of the jurisdiction of proposed projects.	✓				City of Lafayette	Lafayette General Plan Safety Element Policy S-3.1;implemented through City's review process for
3)	Conduct a watershed analysis at least once every three years.				✓	City of Lafayette	No resources at this time, but will consider in future
4)	Assist, support, and/or encourage the U.S. Army Corp of Engineers, various Flood Control and Water Conservation Districts, and other responsible agencies to locate and maintain funding for the development of flood control projects that have high cost-benefit ratios (such as through the writing of letters of support and/or passing resolutions in support of these efforts).	✓				City of Lafayette	City;s Creek Committee works with other agencies, where appropriate, to maintain Lafayette's creek system

Infrastructure Mitigation Strategies

5)	Pursue funding for the design and construction of storm drainage projects to protect vulnerable properties, including property acquisitions, upstream storage such as detention basins, and channel widening with the associated right-of-way acquisitions, relocations, and environmental mitigations.				✓	City of Lafayette	Not the City's policy to acquire and/or expand private properties and/or systems
6)	Continue to repair and make structural improvements to storm drains, pipelines, and/or channels to enable them to perform to their design capacity in handling water flows as part of regular maintenance activities.	✓				City of Lafayette	City's adopted Storm Drain Master Plan and Capital Improvements Program
7)	Continue maintenance efforts to keep storm drains and creeks free of obstructions, while retaining vegetation in the channel (as appropriate), to allow for the free flow of water.	✓				City of Lafayette	City's vegetation management program for publicly owned storm drains and creeks; Lafayette General Plan Safety Element Program S-3.3.1
8)	Enforce provisions under creek protection, stormwater management, and discharge control ordinances designed to keep watercourses free of obstructions and to protect drainage facilities to confirm with the Regional Water Quality Control Board's Best Management Practices.	✓				City of Lafayette	Annual public outreach through City newsletter, letters to creek property owners; Lafayette Municipal Code Chapters 3-5, Stormwater Management, 6-18, Flood Damage Protection
9)	Develop an approach and locations for various watercourse bank protection strategies, including for example, (1) an assessment of banks to inventory areas that appear prone to failure, (2) bank stabilization, including installation of rip rap, (3) stream bed depth management using dredging, and (4) removal of out-of-date coffer dams in rivers and tributary streams.	✓				City of Lafayette	No inventory, but annual inspection program rotating different creek watersheds
10)	Use reservoir sediment removal as one way to increase storage for both flood control and water supply.			✓			Not applicable to City's jurisdcition

Infrastructure Mitigation Strategies

11)	Elevate critical bridges affected by flooding to increase stream flow and maintain critical access and egress routes.				✓		Not applicable to City's jurisdcition
12)	Provide a mechanism to expedite the repair or replacement of levees that are vulnerable to collapse from earthquake-induced shaking or liquefaction, rodents, and other concerns, particularly those protecting critical infrastructure.				✓		Not applicable to City's jurisdcition
13)	Ensure that utility systems in new developments are constructed in ways that reduce or eliminate flood damage.	✓				City of Lafayette	Done through City's review process for new development
14)	Determine whether or not wastewater treatment plants are protected from floods, and if not, investigate the use of flood-control berms to not only protect from stream or river flooding, but also increasing plant security.				✓		Not applicable to City's jurisdcition
15)	Work cooperatively with water agencies, flood control districts, Caltrans, and local transportation agencies to determine appropriate performance criteria for watershed analysis.				✓	City of Lafayette	No resources at this time, but will consider in future and willsupport work of others
16)	Work for better cooperation among the patchwork of agencies managing flood control issues.				✓	City of Lafayette	No resources at this time, but will consider in future and will support work of others
17)	Work cooperatively with upstream communities to monitor creek and watercourse flows to predict potential for flooding downstream.			✓		Cities of Lafayette and Orinda, Town of Moraga	Some discussion about using mutual resources
INFR - e - Landslides							
1)	Include "areas subject to ground failure" in the list of criteria used for determining a replacement schedule (along with importance, age, type of construction material, size, condition, and maintenance or repair history) for pipelines.				✓		Not cost-effective and not applicable to City's storm drain system

Infrastructure Mitigation Strategies

2)	Establish requirements in zoning ordinances to address hillside development constraints in areas of steep slopes that are likely to lead to excessive road maintenance or where roads will be difficult to maintain during winter storms due to landsliding.	✓				City of Lafayette	Lafayette General Plan Safety Element Policy S-1.3; Lafayette Municipal Code Chapters 3-7, Grading, 6-20, Hillside Development
INFR - f - Building Reoccupancy							
1)	Ensure that critical buildings owned or leased by special districts or private utility companies participate in a program similar to San Francisco's Building Occupancy Resumption Program (BORP). The BORP program permits owners of buildings to hire qualified structural engineers[1] to create facility-specific post-disaster inspection plans and allows these engineers to become automatically deputized as City/County inspectors for these buildings in the event of an earthquake or other disaster. This program allows rapid reoccupancy of the buildings. **Note** - A qualified structural engineer is a California licensed structural engineer with relevant experience.			✓			Not applicable to City's jurisdiction
INFR - g - Public Education							
1)	Provide materials to the public related to planning for power outages.		✓			City of Lafayete	No resources at this time, but City will provide information regarding emergency planning in future in newsletter, website.

Infrastructure Mitigation Strategies

2)	Provide materials to the public related to family and personal planning for delays due to traffic or road closures.		✓			City of Lafayete	No resources at this time, but City will provide information regarding emergency planning in future in newsletter, website
3)	Provide materials to the public related to coping with reductions in water supply or contamination of that supply.		✓			City of Lafayette	No resources at this time, but City will provide information regarding emergency planning in future in newsletter, website
4)	Provide materials to the public related to coping with disrupted storm drains, sewage lines, and wastewater treatment.		✓			City of Lafayette (storm drains)	No resources at this time, but City will provide information regarding emergency planning in future in newsletter, website
5)	Facilitate and/or coordinate the distribution of materials that are prepared by others, such as by placing materials in city or utility newsletters, or on community access channels, as appropriate.	✓				City of Lafayette	City's newsletter, website, and public information display includes such information where applicable to community

Health Mitigation Strategies

	Specific Mitigation Strategy	Priority (CHECK ONLY ONE)							Responsible Agency or Department (Required if Existing Program, Very High, High, or Under Study)	Ordinance or Resolution # (if existing program), Estimated Cost and Possible Funding Agency (if high priority), Estimated Date of Completion (if study) OR Other Comments
		Existing Program	Very High	High	Moderate	Under Study	Not Applicable, Not Appropriate, or Not Cost Effective	Not Yet Considered		
HEAL - a - Hospitals and Other Critical Health Care Facilities										
1)	Work with critical health care facilities operators to ensure that critical facilities are structurally sound and have nonstructural systems designed to remain functional following disasters (as required for acute-care hospitals for earthquakes by State law).						✓			Not applicable to City's jurisdcition
2)	Encourage hospitals to work with the California Office of Statewide Health Planning and Development (OSHPD) to formalize arrangements with structural engineers to report to the hospital, assess damage, and determine if the buildings can be reoccupied. The program should be similar to San Francisco's Building Occupancy Resumption Program (BORP) that permits owners of buildings to hire qualified structural engineers to create building-specific post-disaster inspection plans and allows these engineers to become automatically deputized as inspectors for these buildings in the event of an earthquake or other disaster. OSHPD, rather than city/county building departments, has the authority and responsibility for the structural integrity of hospital structures.						✓			Not applicable to City's jurisdcition
3)	Ensure health care facilities are adequately prepared to care for victims with respiratory problems related to smoke and/or particulate matter inhalation.						✓			Not applicable to City's jurisdcition
4)	Ensure these health care facilities have the capacity to shut off outside air and be self-contained.						✓			Not applicable to City's jurisdcition
5)	Ensure that hospitals and other major health care facilities have auxiliary water and power sources.						✓			Not applicable to City's jurisdcition

Health Mitigation Strategies

6)	Work with health care facilities to institute isolation capacity should a need for them arise following a communicable disease epidemic.			✓		Not applicable to City's jurisdcition
7)	Develop printed materials, utilize existing materials (such as developed by FEMA and the American Red Cross), conduct workshops, and/or provide outreach encouraging employees of these critical health care facilities to have family disaster plans and conduct mitigation activities in their own homes.			✓		Not applicable to City's jurisdcition
HEAL - b - Ancillary Health-Related Facilities						
1)	Work with State of California licensing agencies to identify these ancillary facilities in your community.			✓		Not applicable to City's jurisdcition
2)	Encourage these facility operators to develop disaster mitigation plans.			✓		Not applicable to City's jurisdcition
3)	Encourage these facility operators to create, maintain, and/or continue partnerships with local governments to develop response and recovery plans.			✓		Not applicable to City's jurisdcition
HEAL - c - Interface with National and State Health Care Initiatives						
1)	Designate locations for the distribution of antibiotics to large numbers of people should the need arise, as required to be included in each county's Strategic National Stockpile Plan.			✓		Not applicable to City's jurisdiction
2)	Ensure that you know the Metropolitan Medical Response System (MMRS) cities in your area. For example, Oakland and Fremont are the MMRS cities in Alameda County. MMRS cities are those cities that are provided with additional federal funds for organizing, equipping, and training groups of local fire, rescue, medical, and other emergency management personnel.	✓			City of Lafayette	City participates in Contra Costa County OES program
3)	Know if any National Disaster Medical System (NDMS) uniformed or non-uniformed personnel are within one-to-four hours of your community. These federal resources include veterinary, mortuary, and medical personnel.	✓			City of Lafayette	City participates in Contra Costa County OES program

Health Mitigation Strategies

4)	Plan to utilize the State of California Department of Health Services laboratory in Richmond for confirmation of biological agencies and Department of Defense laboratories in Berkeley (Lawrence Berkeley National Laboratory) or Livermore (Lawrence Livermore National Laboratory and Sandia) for confirmation of radiological agents.				✓		Not applicable to City's jurisdiction
HEAL - d - Environmental Health							
1)	Create discussion forums for food and health personnel, including, for example, medical professionals, veterinarians, and plant pathologists, to develop safety, security, and response strategies for food supply contamination.				✓		Not applicable to City's jurisdcition
2)	Train appropriate personnel to understand that the Metropolitan Medical Response System (MMRS) cities in your area. For example, Oakland and Fremont are the MMRS cities in Alameda County. MMRS cities are those cities that are provided with additional federal funds for organizing, equipping, and training groups of local fire, rescue, medical, and other emergency management personnel.	✓				City of Lafayette	City particpates in Contra Costa County OES program
3)	Train appropriate personnel to know if any National Disaster Medical System (NDMS) uniformed or non-uniformed personnel are within one-to-four hours of your community. These federal resources include veterinary, mortuary, and medical personnel.	✓				City of Lafayette	City particpates in Contra Costa County OES program
4)	Train appropriate personnel to know to utilize the State of California Department of Health Services laboratory in Richmond for confirmation of biological agents and Department of Defense laboratories in Berkeley (Lawrence Berkeley National Laboratory) or Livermore (Lawrence Livermore National Laboratory and Sandia) for confirmation of radiological agents.				✓		Not applicable to City's jurisdcition

Housing Mitigation Strategies

	Specific Mitigation Strategy✓	Priority (CHECK ONLY ONE)							Responsible Agency or Department (Required if Existing Program, Very High, High, or Under Study)	Ordinance or Resolution # (if existing program), Estimated Cost and Possible Funding Agency (if high priority), Estimated Date of Completion (if study) OR Other Comments
		Existing Program	Very High	High	Moderate	Under Study	Not Applicable, Not Appropriate, or Not Cost Effective	Not Yet Considered		
HSNG - a - Multi-Hazard										
1)	Be aware of past problems of inadequate hazard disclosure and work with real estate agents to improve enforcement of real estate disclosure requirements for those hazards covered by this plan, for example, by making those agents and the disclosure firms aware of the hazard maps incorporated in this plan and available on the ABAG web site at ***http://quake.abag.ca.gov/mitigation*** , as well as locally developed maps.	✓							City of Lafayette	Lafayette General Plan Housing Element Policies H-1.1. Link to ABAG on City's website. City's maps from General Plan are available on website.
2)	Create incentives for owners of historic or architecturally significant residential buildings to undertake mitigation to levels that will minimize the likelihood that these buildings will need to be demolished after a disaster, particularly if those alterations conform to the federal Secretary of the Interior's *Guidelines for Rehabilitation.*						✓		City of Lafayette	No designated historic residential properties in Lafayette
HSNG - b - Single-Family Homes Vulnerable to Earthquakes										

Housing Mitigation Strategies

1)	Utilize or recommend adoption of a retrofit standard that includes standard plan sets and construction details for voluntary bolting of homes to their foundations and bracing of outside walls of crawl spaces ("cripple" walls), such as that being developed by a committee representing the East Bay-Peninsula-Monterey Chapters of the International Code Council (ICC), California Building Officials (CALBO), the Structural Engineers Association of Northern California (SEAONC), the Northern California Chapter of the Earthquake Engineering Research Institute (EERI-NC), and ABAG's Earthquake Program.		✓	Contra Costa County	Not applicable to City's jurisdiction
2)	Require engineered plan sets for retrofitting of heavy two-story homes with living areas over garages, as well as for split level homes, until standard plan sets and construction details become available.		✓	Contra Costa County	Not applicable to City's jurisdiction
3)	Require engineered plan sets for retrofitting of homes on steep hillsides.		✓	Contra Costa County	Not applicable to City's jurisdiction
4)	Encourage local government building inspectors to take classes on a periodic basis (such as the FEMA-developed training classes offered by ABAG) on retrofitting of single-family homes.		✓	Contra Costa County	Not applicable to City's jurisdiction
5)	Encourage private retrofit contractors and home inspectors doing work in your area to take retrofit classes on a periodic basis(such as the FEMA-developed training classes offered by ABAG) on retrofitting of single-family homes.		✓	Contra Costa County	Not applicable to City's jurisdiction
6)	Conduct demonstration projects on common existing housing types demonstrating structural and nonstructural mitigation techniques as community models for earthquake mitigation.		✓	Contra Costa County	Not applicable to City's jurisdiction
7)	Provide retrofit classes or workshops for homeowners.		✓	Contra Costa County	Not applicable to City's jurisdiction
8)	Establish tool-lending libraries with common tools needed for retrofitting for use by homeowners with appropriate training.		✓	Contra Costa County	Not applicable to City's jurisdiction

Housing Mitigation Strategies

9)	Provide financial incentives to owners of applicable homes to retrofit.	✓		Contra Costa County	Lafayette General Plan Housing Element Policy H-1.1
HSNG - c - Soft-Story Multifamily Residential Structures Vulnerable to Earthquakes					
1)	Require engineered plan sets for voluntary or mandatory soft-story retrofits until a standard plan set and construction details become available.		✓	Contra Costa County	Not applicable to City's jurisdiction
2)	Adopt the 2003 International Existing Building Code, the 1997 UBC, or the latest applicable code standard for the design of voluntary or mandatory soft-story building retrofits.		✓	Contra Costa County	Not applicable to City's jurisdiction
3)	Work to educate condominium and apartment owners, local government staff, engineers, and contractors on soft-story retrofit procedures and incentives using materials such as those developed by ABAG (see ***http://quake.abag.ca.gov/fixit***) and the City of San Jose.		✓	Contra Costa County	Not applicable to City's jurisdiction, but link to ABAG is on City's website.
4)	Conduct an inventory of existing or suspected soft-story residential structures.		✓	Contra Costa County	Not applicable to City's jurisdiction
5)	Use the soft-story inventory to require owners to inform all existing tenants that they live in this type of building and the standard to which it may have been retrofitted, as well as require owners to inform tenants that they will live in this type of building prior to signing a lease.		✓	Contra Costa County	Not applicable to City's jurisdiction
6)	Use the soft-story inventory to require owners to inform all existing tenants that they should be prepared to live elsewhere following an earthquake if the building has not been retrofitted.		✓	Contra Costa County	Not applicable to City's jurisdiction
7)	Investigate and adopt appropriate financial, procedural, and land use incentives for owners of soft-story buildings to facilitate retrofit such as those developed by ABAG (see ***http://quake.abag.ca.gov/fixit***) .		✓	Contra Costa County	Not applicable to City's jurisdiction
8)	Explore development of local ordinances or State regulations to require or encourage owners of soft-story structures to strengthen them.		✓	Contra Costa County	Not applicable to City's jurisdiction

Housing Mitigation Strategies

9)	Provide technical assistance in seismically strengthening soft-story structures.					✓		Contra Costa County	Not applicable to City's jurisdiction
HSNG - d - Unreinforced Masonry Housing Stock									
1)	Continue to actively implement existing State law that requires cities and counties to maintain lists of the addresses of unreinforced masonry buildings and inform property owners that they own this type of hazardous structure.	✓						City of Lafayette	City maintains list; all 4 URM buildings have been mitigated pursuant to Contra Costa County program
2)	Accelerate retrofitting of unreinforced masonry structures that have not been retrofitted, for example, by (a) actively working with owners to obtain structural analyses of their buildings, (b) helping owners obtain retrofit funding, (c) adopting a mandatory versus voluntary, retrofit program, and/or (d) applying penalties to owners who show inadequate efforts to upgrade these buildings.					✓		Contra Costa County	All 4 URM buildings have been mitigated pursuant to Contra Costa County program
3)	Require owners to inform all existing tenants that they live in this type of building and the standard to which it may have been retrofitted, as well as require owners to inform tenants that they will live in this type of building prior to signing a lease.					✓		Contra Costa County	All 4 URM buildings have been mitigated pursuant to Contra Costa County program. County runs building safety programs.
4)	Require owners to inform all existing tenants that they should be prepared to live elsewhere following an earthquake even if the building has been retrofitted, for it has probably been retrofitted to a life-safety standard, not to a standard that will allow occupancy following major earthquakes.					✓		Contra Costa County	Contra Costa County runs building safety programs.
HSNG - e - Other Privately-Owned Structurally Suspicious Residential Buildings and Earthquakes									
1)	Identify and work toward tying down mobile homes used as year-round permanent residences using an appropriate cost-sharing basis (for example, 75% grant, 25% owner).					✓		Contra Costa County	Not applicable to City's jurisdiction
2)	Inventory non-ductile concrete, tilt-up concrete, and other privately-owned structurally suspicious residential buildings.					✓		Contra Costa County	Not applicable to City's jurisdiction

Housing Mitigation Strategies

3)	Adopt the 2003 International Existing Building Code, the 1997 UBC, or the latest applicable code standard for the design of voluntary or mandatory retrofit of seismically vulnerable buildings.				✓		Contra Costa County	Not applicable to City's jurisdiction
4)	Adopt one or more of the following strategies as incentives to encourage retrofitting of privately-owned structurally residential buildings: (a) waivers or reductions of permit fees, (b) below-market loans, (c) local tax breaks, (d) grants to cover the cost of retrofitting or of a structural analysis, (e) land use and procedural incentives, or (f) technical assistance.					✓	City of Lafayette	Not a policy at this time. Will consider as part of an update of General Plan Housing Element
HSNG - f - New Construction and Earthquakes								
1)	Continue to require that all new housing be constructed in compliance with structural requirements of the most recently adopted version of the *California Building Code* .	✓					Contra Costa County	Existing program
2)	Conduct appropriate employee training and support continued education to ensure enforcement of building codes and construction standards, as well as identification of typical design inadequacies of housing and recommended improvements.				✓		Contra Costa County	Not applicable to City's jurisdiction
HSNG - g - Wildfire and Structural Fires								
1)	Increase efforts to reduce hazards in existing development in high wildfire hazard areas (identified as wildland-urban-interface fire-threatened communities or in areas exposed to high-to-extreme fire threat) through improving engineering design and vegetation management for mitigation, appropriate code enforcement, and public education on defensible space mitigation strategies.	✓					City of Lafayette	Lafayette General Plan Safety Element Policies S-4.1, S-4.2; Lafayette Municipal Code Chapter 3-5, Fire Safety
2)	Tie public education on defensible space and a comprehensive defensible space ordinance to a field program of enforcement.					✓	City of Lafayette	No policy or program at this time. Will consider as part of a code enforcement program.

Housing Mitigation Strategies

3)	Require that new homes in wildland-urban-interface fire-threatened communities or in areas exposed to high-to-extreme fire threat be constructed of fire-resistant building materials (including roofing and exterior walls) and incorporate fire-resistant design features (such as minimal use of eaves, internal corners, and open first floors) to increase structural survivability and reduce ignitability. **Note** - See Structural Fire Prevention Field Guide for Mitigation of Wildfires at http://osfm.fire.ca.gov/structural.html.	✓						City of Lafayette	Lafayette General Plan Safety Element Policies S-4.1, S-4.2; Lafayette Municipal Code Chapter 3-5, Fire Safety
4)	Develop financial incentives for homeowners to be "model" defensible space homes in neighborhoods that are wildland-urban- interface fire-threatened communities or in areas exposed to high-to-extreme fire threat.						✓	City of Lafayette	No policy or program at this time. Will consider as part of an update of General Plan Housing Element
5)	Consider fire safety, evacuation, and emergency vehicle access when reviewing proposals to add secondary units or additional residential units in wildland-urban- interface fire-threatened communities or in areas exposed to high-to-extreme fire threat.	✓						City of Lafayette	Lafayette General Plan Safety Element Policies S-4.1, S-4.2; Lafayette Municipal Code Chapters 3-5, Fire Safety, 6-20, Hillside
6)	Adopt and/or amend, as needed, updated versions of the *California Building and Fire Codes* so that optimal fire-protection standards are used in construction and renovation projects.				✓			Contra Costa County	Not applicable to City's jurisdiction
7)	Create a mechanism to enforce provisions of the *California Building and Fire Codes* and local housing codes that require the installation of smoke detectors and/or fire-extinguishing systems by making installation a condition of (a) finalizing a permit for any work on existing properties valued at over a fixed amount, such as $500 or $1000, and/or (b) a condition for the transfer of property if these changes are determined cost-effective strategies.				✓			Contra Costa County	Not applicable to City's jurisdiction
8)	Work to ensure a reliable source of water for fire suppression in rural-residential areas through the cooperative efforts of water districts, fire districts, and residents.	✓							City supports efforts of fire and water districts to ensure adequate water supplies

Housing Mitigation Strategies

9)	Expand vegetation management programs in wildland-urban- interface fire-threatened communities or in areas exposed to high-to-extreme fire threat to more effectively manage the fuel load through roadside collection and chipping, mechanical fuel reduction equipment, selected harvesting, use of goats or other organic methods of fuel reduction, and selected use of controlled burning.					✓	City of Lafayette,	No policy or program at this time for private properties. Will support efforts by Fire District, other districts -- Lafayette General Plan Safety Program S-4.2.3
10)	Promote the installation of early warning fire alarm systems in homes wildland-urban-interface fire-threatened communities or in areas exposed to high-to-extreme fire threat connected to fire department communication systems.				✓		Contra Costa County	Not applicable to City's jurisdiction
11)	Establish a Fire Hazard Abatement District to fund reduction in fire risk of existing properties through vegetation management that includes reduction of fuel loads, use of defensible space, and fuel breaks.					✓	City of Lafayette	No policy or program at this time. Will consider program as part of update of General Plan
12)	Work with residents in rural-residential areas to ensure adequate access and evacuation in wildland-urban-interface fire-threatened communities or in areas exposed to high-to-extreme fire threat.	✓					City of Lafayette	Development review process for new development in hillsides requires adeqaute access
13)	Require fire sprinklers in new homes located more than 1.5 miles or a 5-minute response time from a fire station or in an identified high hazard wildland-urban-interface wildfire area.	✓						Lafayette General Plan Safety Element Program S-4.2.7
14)	Require fire sprinklers in all new or substantially remodeled multifamily housing, regardless of distance from a fire station.	✓						Lafayette General Plan Safety Element Program S-4.2.7
15)	Require sprinklers in all mixed use development to protect residential uses from fires started in non-residential areas.	✓						Lafayette General Plan Safety Element Program S-4.2.7
16)	Compile a list of high-rise and high-occupancy buildings which are deemed, due to their age or construction materials, to be particularly susceptible to fire hazards, and determine an expeditious timeline for the fire-safety inspection of all such structures.				✓		Contra Costa County	Not applicable to City's jurisdiction
17)	Conduct periodic fire-safety inspections of all multi-family buildings, as required by State law.				✓		Contra Costa County	Not applicable to City's jurisdiction

Housing Mitigation Strategies

18)	Ensure that fire-preventive vegetation-management techniques and practices for creek sides and high-slope areas do not contribute to the landslide and erosion hazard.	✓					City of Lafayette	City's vegetation management program and creek maintenance program
19)	Create a mechanism to require the bracing of water heaters and flexible couplings on gas appliances, and/or (as specified under "a. Single-family homes vulnerable to earthquakes" above) the bolting of homes to their foundations and strengthening of cripple walls to reduce fire ignitions due to earthquakes.				✓		Contra Costa County	Not applicable to City's jurisdiction
20)	Work with the State Fire Marshall, the California Seismic Safety, PEER, and other experts to identify and manage gas-related fire risks of soft-story residential or mixed use buildings that are prone to collapse and occupant entrapment consistent with the natural gas safety recommendations of Seismic Safety Commission Report SSC-02-03. **Note** - See http://www.seismic.ca.gov/pub/CSSC_2002-03_Natural%20Gas%20Safety.pdf. **Also note** - any values that are installed may need to have both excess flow and seismic triggers ("hybrid" valves).				✓		Contra Costa County	Not applicable to City's jurisdiction
HSNG - h - Flooding								
1)	To reduce flood risk, and thereby reduce the cost of flood insurance to property owners, work to qualify for the highest-feasible rating under the Community Rating System of the National Flood Insurance Program.					✓	City of Lafayette	No policy or program at this time regarding highest-feasible rating, but City has program to participate in the Nat'l Flood Ins program -- General Plan Safety Element Program S-3.2.2.
2)	Balance the housing needs of residents against the risk from potential flood-related hazards.	✓					City of Lafayette	Lafayette General Plan Safety Element Policies S-3.1 through 3.5; Lafayette Municipal Code Chapter 6-18, Flood Damage Protection

Housing Mitigation Strategies

| | | |

Housing Mitigation Strategies

1)	Increase efforts to reduce landslides and erosion in existing and future development by improving appropriate code enforcement and use of applicable standards, such as those appearing in the *California Building Code* , California Geological Survey *Special Report 117 – Guidelines for Evaluating and Mitigating Seismic Hazards in California, American Society of Civil Engineers (ASCE) report Recommended Procedures for Implementation of DMG Special Publication 117: Guidelines for Analyzing and Mitigating Landslide Hazards in California, and the California Board for Geologists and Geophysicists Guidelines for Engineering Geologic Reports.* Such standards should cover excavation, fill placement, cut-fill transitions, slope stability, drainage and erosion control, slope setbacks, expansive soils, collapsible soils, environmental issues, geological and geotechnical investigations, grading plans and specifications, protection of adjacent properties, and review and permit issuance.	✓						City of Lafayette	Lafayette General Plan Safety Element Policies S-1.2 through 1.4; Lafayette Municipal Code Chapter 6-20; through development review process
2)	Increase efforts to reduce landslides and erosion in existing and future development through continuing education of design professionals on mitigation strategies.	✓						City of Lafayette	Lafayette General Plan Safety Element Policies S-1.2 through 1.4; Lafayette Municipal Code Chapter 6-20; through development review process
HSNG - j - Building Reoccupancy									
1)	Develop and enforce an ordinance for disaster-damaged structures to ensure that residential buildings are repaired in an appropriate and timely manner and retrofitted concurrently to avoid a recurrence.				✓			Contra Costa County	Not applicable to City's jurisdiction
HSNG - k - Public Education									
1)	Provide information to residents of your community on the availability of interactive hazard maps showing your community on ABAG's web site.			✓				City of Lafayette	Will provide information at City Offices, newsletter, website. City website has link to ABAG.

Housing Mitigation Strategies

2)	Develop printed materials, utilize existing materials (such as developed by FEMA and the American Red Cross), conduct workshops, and/or provide outreach encouraging residents to have family disaster plans that include drop-cover-hold earthquake drills, fire and storm evacuation procedures, and shelter-in-place emergency guidelines.	✓						City of Lafayette	City offices; City newsletter
3)	Better inform residents of comprehensive mitigation activities, including elevation of appliances above expected flood levels, use of fire-resistant roofing and defensible space in high wildfire threat and wildfire-urban-interface areas, structural retrofitting techniques for older homes, and use of intelligent grading practices through workshops, publications, and media announcements and events.						✓	City of Lafayette	Will provide information at City Offices, newsletter, website
4)	Develop a public education campaign on the cost, risk, and benefits of earthquake, flood, and other hazard insurance.						✓	City of Lafayette	Will provide information at City Offices, newsletter, website
5)	Use disaster anniversaries, such as April (Earthquake Month and the 1906 earthquake), September (9/11), and October (Loma Prieta earthquake and Oakland Hills fire), to remind the public on safety and security mitigation activities.						✓	City of Lafayette	Will provide information at City Offices, newsletter, website
6)	Sponsor the formation and training of Community Emergency Response Teams (CERT) training. [Note – these programs go by a variety of names in various cities and areas.]	✓						City of Lafayette	City has CERT program with County
7)	Include flood fighting technique session based on California Department of Water Resources training to the list of available public training classes offered by CERT.						✓		Will consider as part of City's Emergency Preparedness Program
8)	Institute the neighborhood watch block captain and team programs outlined in the Citizen Corps program guide.						✓	City of Lafayette	Will consider as part of City's Emergency Preparedness Program